In the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

1. (canceled) The method of constructing an electronic system from a set of components comprising:

selecting one or more key system parameters,

creating a model of the system based on component performance,

performing a sensitivity analysis on the model to identify critical components and parameters of those components required to meet the key system parameters,

performing tests on the identified critical components to measure the identified parameters producing a set of measurements for each critical component,

associating the set of measurements with the component,

assembling the system using the measurements associated with the components.

2. (canceled) The method of Claim 1 where assembling the system using the measurements associated with the components further comprises:

selecting individual components for assembly into a system based on the associated measurements such that the resulting system meets the key system parameters.

3. (canceled) The method of Claim 2 where associating the set of measurements further comprises storing the set of measurements in a memory which is part of the component.

4. (canceled) The method of Claim 2 where associating the set of measurements further comprises storing the set of measurements in a memory which is attached to the component.

5. (amended) A method of constructing an electronic system from a set of components comprising:

selecting one or more key system parameters,

creating a model of the system based on component performance,

performing a sensitivity analysis on the model to identify critical components and parameters of those components required to meet the key system parameters,

performing tests on the identified critical components to measure the identified parameters producing a set of measurements for each critical component,

associating the set of measurements with the critical component,

storing the set of measurements as an entry in a database,

associating the database entry with an identifier for the critical components, and

selecting individual critical components for assembly into a system based on the associated measurements such that the resulting system meets the key system parameters.

6. (amended) The method of Claim 5 where the identifier for the critical component is a serial number.

7. (amended) The method of Claim 5 where the identifier for the critical component is a sequence number.

8. (amended) The method of Claim 5 where the identifier for the critical component is a location in a component carrier.

9. (canceled) The method of Claim 2 where associating the set of measurements further comprises grouping components according to measurements.

10. (amended) The method of Claim 5 ~~2~~ where assembling the system using the measurements associated with the critical components further comprises:

assembling the system from a set of components,

retrieving the measurements associated with each of the set of identified critical components, and

calculating system calibration coefficients using the retrieved measurements.

11. (amended) The method of Claim 10 where associating the set of measurements further comprises storing the set of measurements in a memory which is part of the critical component.

12. (amended) The method of Claim 10 where associating the set of measurements further comprises storing the set of measurements in a memory which is attached to the critical component.

13. (amended) The method of Claim 10 where associating the set of measurements further comprises storing the set of measurements as an entry in a database, and associating the database entry with an identifier for the critical component.

14. (amended) The method of Claim 13 where the identifier for the critical component is a serial number.

15. (amended) The method of Claim 13 where the identifier for the critical component is a sequence number.

16. (amended) The method of Claim 13 where the identifier for the critical component is a location in a component carrier.

17. The method of Claim 10 where associating the set of measurements further comprises grouping components according to measurements.